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GI & HEPATOLOGY NEWS

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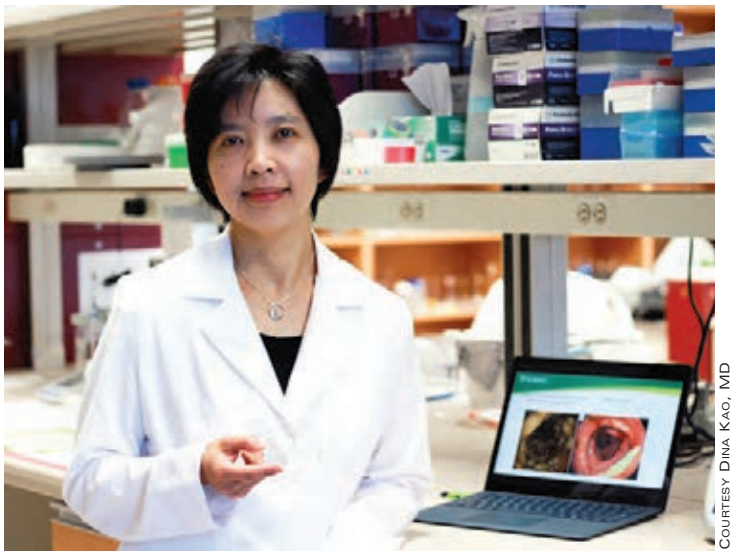

COURTESY DINA KAO, MD

Dr. Dina Kao and associates found that capsules were preferred by patients and less expensive to administer.

FMT by oral capsule found noninferior to colonoscopy

BY BIANCA NOGRADY
Frontline Medical News

Fecal microbiota transplantation (FMT) using oral capsules as the delivery method has been shown to be noninferior to delivery using colonoscopy for the treatment of *Clostridium difficile* infection, but with a significantly lower price tag.

In an unblended noninferiority trial, published in JAMA, 116 adults with at least three documented episodes of *C. difficile* infection were randomized to either 360 mL of fecal slurry delivered to the cecum via colonoscopy or to 40 capsules of processed fecal microbiota swallowed under direct observation.

At 12 weeks after the treatment, 96.2% of patients in both groups reported the absence of recurrent *C. difficile* infection. Two patients in each group had a recurrence of infection, and were successfully treated again with FMTs using the same modality (JAMA. 2017 Nov 28;318:1985-93. doi: 10.1001/jama.2017.17077).

Dina Kao, MD, of the department of medicine at the

See **Capsule** · *page 19*

Hispanic patients trail blacks, whites in bariatric surgery

BY RANDY DOTINGA
Frontline Medical News

SAN DIEGO – A study of procedures at academic centers provides evidence that obese Hispanics in the United States undergo bariatric surgery at a much lower rate than whites and blacks. It also reveals marked regional variations in overall weight-loss surgery.

"Our findings do suggest that severely obese Hispanics are utilizing bariatric surgery much lower than other ethnic groups," said study coauthor Ninh T. Nguyen, MD, FACS, chair of the department of surgery at the University of California Irvine Medical Center, in an interview. "Our research does not specifically address the reasons for this gap in the delivery of care. Further research will need to be done to understand the reasons and the ways to close this gap."

Dr. Nguyen presented the findings at the annual clinical congress of the American College of Surgeons.

According to Dr. Nguyen, the researchers undertook the study to better understand how bariatric surgery is delivered across ethnicities and geographic regions in the United States.

The researchers analyzed statistics from the Vizient health care performance database for the years 2013-2015. They focused on patients at about 120 academic centers who

See **Bariatric** · *page 20*

INSIDE

MMR deficiency testing remains low

BY SHARON WORCESTER
Frontline Medical News

Overall utilization of mismatch repair (MMR) deficiency testing is poor among patients with colorectal cancer, and utilization also remains low among young adults despite national guidelines calling for universal testing, according to an analysis of cases from the National Cancer Database.

The findings suggest that interventions that target groups at risk for nonadherence to guidelines may be warranted, wrote Talha Shaikh, MD, and colleagues at Fox Chase Cancer Center, Philadelphia. The report was published in JAMA Oncology (2017 Nov 9. doi: 10.1001/jamaoncol.2017.3580).

Of 152,993 adults with colorectal cancer (CRC) who

See **Testing** · *page 17*

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LETTER FROM THE EDITOR: Fiscal focus and health equity

As the Editor in Chief of the AGA's official publication, I try, in this column, to keep my personal opinions to a minimum and project a balanced political view of current health care events. This is becoming increasingly difficult.

I understand competing federal agendas and I am a student of American history who is interested in themes of federalism (Hamilton) versus states' rights (Jefferson), limited government versus Washington overreach, and how Article 1 Section 8 of the U.S. Constitution led eventually to massive federal expansions under FDR, LBJ, and Barack Obama (facilitated by several key Supreme Court decisions dating back over 75 years).

But now we are witnessing the loss of federal support for 9 million children who depend on the Children's Health Insurance Program (CHIP), because we "don't have the money" (Sen. Orrin Hatch, R-Utah). This fiscal focus comes as Congress is about to pass, at press time, a comprehensive tax reform that will reduce federal revenues and add substantially to our national debt. Is our general commitment to the Triple Aim and health equity just empty rhetoric?

DR. ALLEN

This fiscal focus comes as Congress is about to pass ... a comprehensive tax reform that will reduce federal revenues and add substantially to our national debt. Is our general commitment to the Triple Aim and health equity just empty rhetoric?

Politics aside, there are enormous shifts in the landscape with regard to health care delivery – changes that will affect your practices. Mergers between payers and frontline delivery companies (Aetna and CVS), Amazon's 1492 stealth lab, and United Health Group's purchase of DaVita's primary care consortium will have implications for physicians and health systems that will rival anything happening at the federal level. We are in for massive disruption spurred by current high prices and easy access to high-cost specialty medicine.

Next month, *The New Gastroenterologist* will convert to an all-digital format with a key article to be published in *GI & Hepatology News*. This month, we have interesting articles on fecal microbiome transplant (via capsule), biosimilars, AASLD highlights, and new approaches to GI cancer bleeding, among others.

John I. Allen, MD, MBA, AGAF
Editor in Chief

DDSEP eight

Digestive Diseases Self-Education Program

Quick quiz

Q1. A 45-year-old woman underwent anti-reflux surgery 5 years ago for well-characterized reflux disease and a 5-cm hiatal hernia. After brief initial postoperative dysphagia treated conservatively with dietary adjustment, symptoms completely resolved. However, over the past 3 months, she has developed new dysphagia following solid meals, sometimes associated with epigastric pain. She localizes the dysphagia to the retrosternal region, with infrequent regurgitation but no heartburn.

Which of the following is the most appropriate next step?

A. Upper endoscopy
B. Omeprazole once a day
C. pH study off PPI
D. Esophageal manometry
E. Barium swallow

Q2. Which HCV genotype is associated with the highest risk of cirrhosis and hepatocellular carcinoma?

A. 1
B. 2
C. 3
D. 4

The answers are on page 13.

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FROM THE AGA JOURNALS

Eradicating HCV significantly improved liver stiffness

BY AMY KARON
Frontline Medical News

Eradicating chronic hepatitis C virus (HCV) infection led to significant decreases in liver stiffness in a systematic review and meta-analysis of nearly 3,000 patients.

Mean liver stiffness fell by 4.1 kPa (95% confidence interval, 3.3-4.9 kPa) 12 or more months after patients achieved sustained virologic response (SVR) following HCV treatment, but did not significantly change in patients who did not achieve SVR, reported Siddharth Singh, MD, of the University of San Diego, La Jolla, Calif., and his associates in the January issue of Clinical Gastroenterology and Hepatology (doi: 10.1016/j.cgh.2017.04.038). The results were especially striking in patients who received direct-acting antiviral agents (DAAs) or who had high baseline levels of inflammation, the investigators added.

Watch this story's Video Insights at gastro.org/journals-and-publications/video-insights.

Based on these findings, about 47% of patients with advanced fibrosis or cirrhosis at baseline will drop below 9.5 kPa after achieving SVR, they reported. "Future research is warranted on the impact of magnitude and kinetics of decline in liver stiffness on improvement in liver-related outcomes."

Eradicating HCV infection was known to decrease liver stiffness, but the magnitude of decline was not well understood. Therefore, the reviewers searched the literature through October 2016 for studies of HCV-infected adults who underwent liver stiffness measurement by vibration-controlled transient elastography before and at least once after completing HCV treatment. All studies also included data on median liver stiffness in patients who did and did not achieve SVR. The search identified 23 observational studies and one post hoc analysis of a randomized controlled trial, for a total of 2,934 patients, of whom 2,214 achieved SVR.

In patients who achieved SVR, mean liver stiffness decreased by 2.4 kPa at the end of treatment (95% CI, 1.7-3.0 kPa), by 3.1 kPa 1-6 months later (95% CI, 1.6-4.7 kPa), and by 3.2 kPa 6-12 months after completing treatment (90% CI, 2.6-3.9 kPa). A year or more after finishing treatment, patients who achieved SVR had a 28% median decrease in liver stiffness (interquartile range, 22%-35%). Liver stiffness did not significantly change in patients who did not achieve SVR, the reviewers reported.

Mean liver stiffness declined significantly more in patients who received DAAs (4.5 kPa) than in those receiving interferon-based regimens (2.6 kPa; $P = .03$). However, studies of DAAs included patients with greater liver stiffness at baseline, which could partly explain this discrepancy. Baseline cirrhosis also was associated with a greater decline in liver stiffness (mean, 5.1 kPa, vs. 2.8 kPa in patients without cirrhosis; $P = .02$), as was high baseline alanine aminotransferase levels (P less than or equal to .01). In patients whose baseline liver stiffness measurement exceeded 9.5 kPa, 47% had their liver stiffness decrease to less than 9.5 kPa after SVR.

One reviewer disclosed funding from the National Institutes of Health/National Library of Medicine. None had conflicts of interest.

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The current era of new-generation DAAs have revolutionized the treatment of chronic HCV infection, providing short-duration, safe, and consistently effective regimens that achieve SVR or cure in nearly 100% of patients. While achieving SVR is important, even more important is the long-term impact of SVR and whether cure translates into outcomes such as improved mortality or a reduced risk of disease progression. Although improved mortality after SVR has been demonstrated, one of the main drivers of risk of disease progression is the severity of hepatic fibrosis.


DR. WONG

In the current meta-analysis, Singh et al. elegantly addressed a recurring question regarding the effectiveness of DAAs: Does achieving SVR actually lead to durable improvements in hepatic fibrosis? This is an especially critical question as sustained improvements in fibrosis would translate into a long-term reduction in disease progression. Among a total of 24 studies that included 2,934 chronic HCV patients, the authors observed significant improvements in hepatic fibrosis, as measured by transient elastography, with the greatest improvements seen among patients with baseline cirrhosis.

Although it has been debated that some of the initial improvements in liver stiffness measurements may be more reflective of improvements in liver inflammation that may confound fibrosis assessment, what is most striking about this study is the durability of fibrosis improvement beyond the first year after treatment. Even beyond 1 year after completing HCV treatment, patients who achieved SVR had a 28% median reduction in liver stiffness. Although the findings of this study are expected, the rigorous and systematic method by which the authors conducted their work further adds to the indisputable evidence supporting the benefit of HCV treatment.

Robert J. Wong, MD, MS, is in the department of medicine and is director of research and education, division of gastroenterology and hepatology, Alameda Health System – Highland Hospital, Oakland, Calif. He has received a 2017-2019 Clinical Translational Research Award from AASLD, has received research funding from Gilead and AbbVie, and is on the speakers bureau of Gilead, Salix, and Bayer. He has also done consulting for and been an advisory board member for Gilead.

Adjusting FIT thresholds improved their performance

BY AMY KARON
Frontline Medical News

Physicians can minimize the heterogeneity of fecal immunochemical colorectal cancer screening tests (FIT) by adjusting thresholds for positivity, according to researchers. The report is in the January issue of Gastroenterology (doi: 10.1053/j.gastro.2017.09.018).

"Rather than simply using thresholds recommended by the manufacturer, screening programs should choose thresholds based on intended levels of specificity and manageable positivity rates," wrote PhD student Anton Gies of the German Cancer Research Center and the National Center for Tumor Diseases in Heidelberg, Germany, with his associates.

The investigators directly compared nine different fecal immunochemical assays using stool samples from 516 individuals, of whom 216 had advanced adenoma or colorectal cancer (CRC). Using thresholds recommended by manufacturers (2-17 mcg Hb/g feces) produced widely ranging sensitivities (22%-46%) and specificities (86%-98%). Using a uniform threshold of 15 mcg Hb/g feces narrowed the range of specificity (94%-98%), but sensitivities remained quite variable (16%-34%). Adjusting detection thresholds to obtain preset specificities (99%, 97%, or 93%) greatly narrowed both sensitivity (14%-18%, 21%-24%, and 30%-35%, respectively) and rates of positivity (2.8%-3.4%, 5.8%-6.1%, and 10%-11%, respectively), the researchers reported.

Increasingly, physicians are using FIT to screen for colorectal neoplasia. In a prior study (Ann Intern Med. 2009 Feb 3;150[3]:162-90) investigators evaluated the diagnostic performance of six qualitative point-of-care FITs among screening colonoscopy patients in Germany, and found that the tests had highly variable sensitivities and specificities for the detection of colorectal neoplasia. Not surprisingly, the most sensitive tests were the least specific, and vice versa, which is

Continued on following page

FROM THE AGA JOURNALS

Continued from previous page

the problem with using fixed thresholds in qualitative FITs, the researchers asserted.

Quantitative FITs are more flexible than qualitative assays because users can adjust thresholds based on fecal hemoglobin concentrations. However, very few studies had directly compared sensitivities and specificities among quantitative FITs, and "it is unclear to what extent differences ... reflect true heterogeneity in test performance or differences in study populations or varying pre-analytical conditions," the investigators wrote. Patients in their study underwent colonoscopies in Germany between 2005 and 2010, and fecal samples were stored at –80 °C until analysis. The researchers calculated test sensitivities and specificities by using colonoscopy and histology reports evaluated by blinded, trained research assistants.

"Apparent heterogeneity in diagnostic performance of quantitative fecal immunochemical tests can be overcome to a large extent by adjusting thresholds to yield defined levels of specificity or positivity rates," the investigators concluded. Only 16 patients in this study had CRC, which made it difficult to pinpoint test sensitivity for this finding, they noted. However, they found similar sensitivity estimates for CRC in an ancillary clinical study.

Manufacturers provided test kits free of charge. There were no external funding sources, and the researchers reported having no conflicts of interest.

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The FIT is an important option for CRC screening, endorsed by guidelines and effective for mass screening using mailed outreach. Patients offered FIT or a choice between FIT and colonoscopy are more likely to be screened.

DR. LEVIN

In the United States, FIT is a qualitative test (reported as positive or negative), based on Food and Drug Administration regulations, in an attempt to simplify clinical decision making. In Europe, FIT has been used quantitatively, with adjustable positivity rate and sensitivity pegged to available colonoscopy resources. Adding complexity, there are multiple FIT brands, each with varying performance, even at similar hemoglobin concentrations. Each brand has a different sensitivity, specificity, and positivity rate, because reagents, buffers, and collection devices vary. Ambient temperature during mailing and transport time to processing labs also can affect test performance.

It is appealing for program administrators to adjust hemoglobin cutoffs, managing positivity, specificity, and sensitivity of FIT. Colonoscopy resources are difficult to expand, and a high positivity rate can lead to excess patient and physician anxiety. In the Dutch national CRC screening program, changing brands between the pilot phase and implementation led to a disruptive increase in test positivity. This strained available colonoscopy resources and led to long backlogs for follow-up colonoscopy. Program stakeholders responded by raising the positivity threshold. In the United States, however, adjustable FIT thresholds are not currently an option for clinical practice. Research such as this will help inform the need for flexible hemoglobin cutoffs.

Theodore R. Levin, MD, is chief of gastroenterology, Kaiser Permanente Medical Center, Walnut Creek, Calif. He has no conflicts of interest.

Biologics in pregnancy did not affect infant vaccine response

BY AMY KARON
Frontline Medical News

The use of biologic therapy during pregnancy did not lower antibody titers among infants vaccinated against *Haemophilus influenzae* B (HiB) or tetanus toxin, according to the results of a study of 179 mothers reported in the January issue of Clinical Gastroenterology and Hepatology (2017. doi: 10.1016/j.cgh.2017.08.041).

Additionally, there was no link between median infliximab concentration in uterine cord blood and antibody titers among infants aged 7 months and older, wrote Dawn B. Beaulieu, MD, with her associates. "In a limited cohort of exposed infants given the rotavirus vaccine, there was no association with significant adverse reactions," they also reported.

YARINCA/ISTOCK

Active inflammatory bowel disease (IBD) increases the risk of adverse pregnancy outcomes. Retrospective studies have found no link between anti–tumor necrosis factor therapy and adverse birth outcomes or congenital malformations, but some biologics can cross the placenta and remain in infants for up to a year after birth, the researchers noted. In 2010, an infant whose mother was on infliximab for Crohn's disease died (J Crohns Colitis. 2010 Nov;4[5]:603-5) after receiving the BCG vaccine, which is contraindicated in individuals on immunosuppressives.

Experts now recommend against live vaccinations for infants who may have detectable concentrations of biologics, but it remained unclear whether these infants can mount adequate responses to inactive vaccines. Therefore, the researchers analyzed data from the Pregnancy in IBD and Neonatal Outcomes (PIANO) registry collected between 2007 and 2016 and surveyed women about their infants' vaccination history. They also quantified antibodies in serum samples from infants aged 7 months and older and analyzed measured concentrations of biologics in cord blood.

Among 179 mothers with IBD, most had inactive (77%) or mild disease activity (18%) during pregnancy, the researchers said. Eleven (6%) mothers were not on immunosuppressives while pregnant, 15 (8%) were on an immunomodulator, and the rest were on biologic monotherapy (65%) or a biologic plus an immunomodulator (21%). A total of 46 infants had available HiB titer data, of whom 38 were potentially exposed to biologics; among 49 infants with available tetanus titers, 41 were potentially exposed. In all, 71% of exposed infants had protective levels of antibodies against HiB, and 80% had protective titers to tetanus toxoid. Proportions among unexposed infants were 50% and 75%, respectively. Proportions of protective antibody titers did not significantly differ between groups even after excluding infants whose mothers received certolizumab pegol, which has negligible rates of placental transfer.

A total of 39 infants received live rotavirus vaccine despite having detectable levels of biologics in cord blood at birth. Seven developed mild vaccine reactions consisting of fever (six infants) or diarrhea (one infant). This proportion (18%) resembles that from a large study (N Engl J Med. 2006;354:23-33) of healthy infants who were vaccinated against rotavirus, the researchers noted. "Despite our data suggesting a lack of severe side effects with the rotavirus vaccine in these infants, in the absence of robust evidence, one should continue to avoid live vaccines in infants born to mothers on biologic therapy (excluding certolizumab) during the first year of life or until drug clearance is confirmed," they suggested. "With the growing availability of tests, one conceivably could test serum drug concentration in infants, and, if undetectable, consider live vaccination at that time, if appropriate for the vaccine, particularly in infants most likely to benefit from such vaccines."

The Crohn's and Colitis Foundation provided funding. Dr. Beaulieu disclosed a consulting relationship with AbbVie, and four coinvestigators also reported ties to pharmaceutical companies.

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FROM THE AGA JOURNALS

Follow up patients with risky adenomas, serrated polyps

BY AMY KARON
Frontline Medical News

The simultaneous colonoscopic presence of serrated polyps and high-risk adenomas led to a fivefold increase in the odds of metachronous high-risk adenomas in a large population-based registry study reported in Gastroenterology (2017. doi: 10.1053/j.gastro.2017.09.011).

The data "support the recommendation that individuals with large and high-risk serrated lesions require closer surveillance," said Joseph C. Anderson, MD, of White River Junction Department of Veterans Affairs Medical Center, Vt., with his associates. When discounting size and histology, the presence of serrated polyps alone was not associated with an increased risk for metachronous high-risk adenoma, they also reported. Although serrated polyps are important precursors of colorectal cancer, relevant longitudinal surveillance data are sparse. Therefore, the investigators studied 5,433 adults who underwent index and follow-up colonoscopies a median of 4.9 years apart and were tracked in the population-based New Hampshire Colonoscopy Registry. The cohort had a median age of 61 years and half of individuals were male.

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After adjusting for age, sex, smoking status, body mass index, and median interval between colonoscopies, individuals were at significantly increased risk of metachronous high-risk adenoma if their baseline colonoscopy showed high-risk adenoma and synchronous serrated polyps (odds ratio, 5.6; 95% confidence interval, 1.7-18.3), high-risk adenoma with synchronous sessile serrated adenomas (or polyps) or traditional serrated adenomas (OR, 16.0; 95% CI, 7.0-37.0), or high-risk adenoma alone (OR, 3.9; 95% CI, 2.8-5.4), vs. participants with no findings.

The researchers also found that the index presence of large (at least 1 cm) serrated polyps greatly increased the likelihood of finding large metachronous serrated polyps on subsequent colonoscopy (OR, 14.0; 95% CI, 5.0-40.9). "This has clinical relevance, since previous studies have demonstrated an increased risk for colorectal cancer in individuals with large serrated polyps," the researchers wrote. "However, this increased risk may occur over a protracted time period of 10 years or more, and addressing variation in serrated polyp detection rates and completeness of resection may be more effective than a shorter surveillance interval at reducing risk in these individuals."

The index presence of sessile serrated adenomas or polyps, or traditional serrated adenomas, also predicted the subsequent development of large serrated polyps (OR, 9.7; 95% CI, 3.6-25.9). The study did not examine polyp location or morphology (flat versus polypoid), but the association might be related to right-sided or flat lesions, which colonoscopists are more likely to miss or to incompletely excise than more defined polypoid lesions, the researchers commented. "Additional research is needed to further clarify the associations between index patient characteristics, polyp location, size, endoscopic appearance and histology, and the metachronous risk of advanced lesions and colorectal cancer in order to refine current surveillance recommendations for individuals undergoing colonoscopy," they commented.

The study spanned January 2004 to June 2015, and awareness about the importance of serrated polyps rose during this period, they also noted.

The National Cancer Institute and the Norris Cotton Cancer Center provided funding. The researchers reported having no conflicts of interest.

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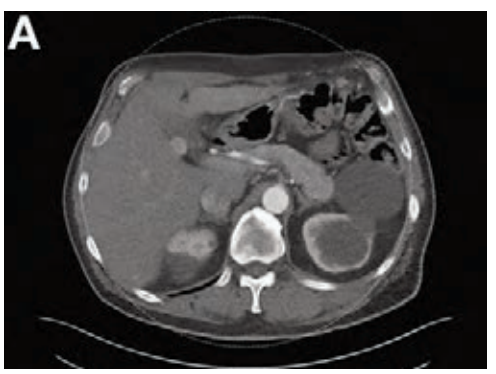
CLINICAL CHALLENGES AND IMAGES

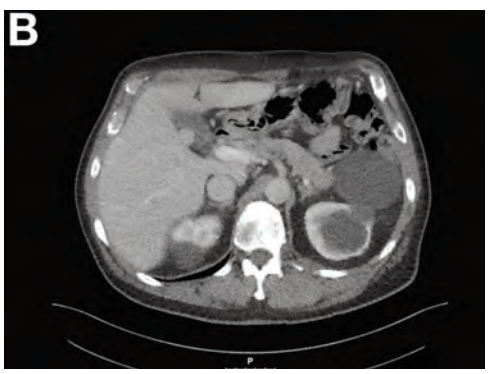
What is your diagnosis?

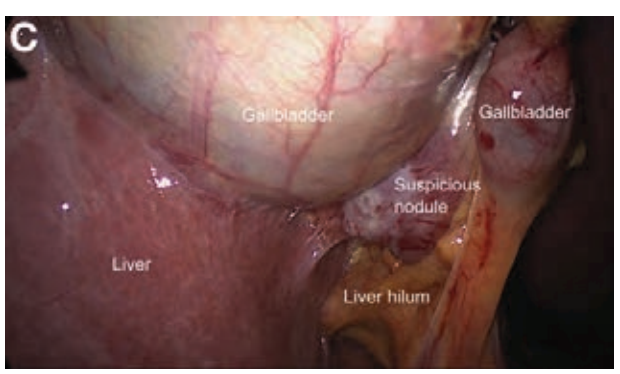
By Mareike Röther, MD, Jean-Francois Dufour, MD, and Beat Schnüriger, MD. Published previously in Gastroenterology (2013;144[3]:510, 659).

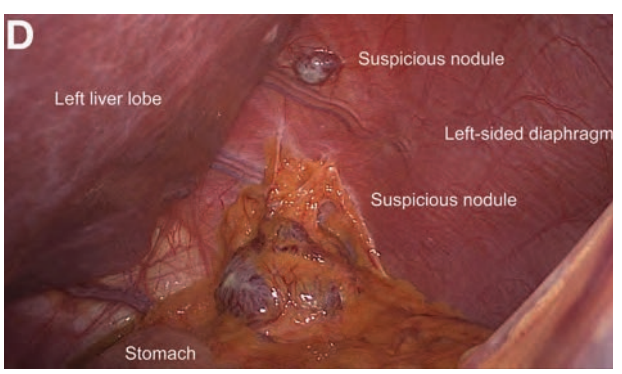
A 62-year-old man with chronic hepatitis C and Child A liver cirrhosis was referred for abdominal computed tomography (CT) after a nodular liver lesion in segment V was found on ultrasonography. His medical history included esophageal varices grade I, reflux esophagitis grade III, and a posttraumatic splenectomy 50 years ago. The physical examination was unremarkable and the laboratory values were normal (alpha-fetoprotein, 1.9 mcg/L). Abdominal CT scan revealed a homogenous, smoothly outlined, round lesion measuring 15 × 18 mm located between the gallbladder and the liver (segment V). During the arterial phase the lesion seemed to be enhanced (Figure A) and during the venous phase the lesion's density was similar to the surrounding liver parenchyma (Figure B). To rule out a small hepatocellular carcinoma, diagnostic laparoscopy was performed. The nodule could be visualized at the Calot's triangle of the gallbladder (Figure C). We found unexpected, multiple nodules of different sizes throughout the entire left upper abdominal quadrant. These nodules were located within the greater omentum and the mesentery as well as at the peritoneal surface including the left-sided diaphragm (Figure D). Laparoscopic cholecystectomy and resection of the suspicious nodule at the Calot's triangle was performed. The specimen was sent for histology (Figure E). The postoperative course was uneventful.

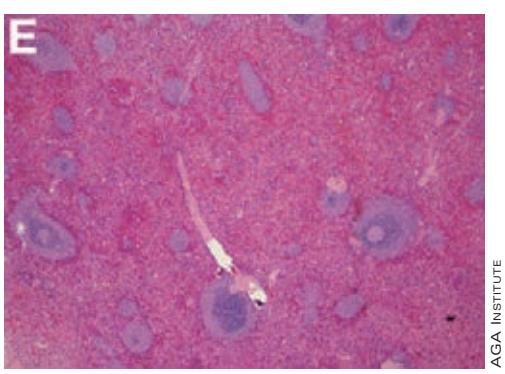
The diagnosis is on page 18.











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The New Gastroenterologist goes digital

Beginning in February 2018, *The New Gastroenterologist* (TNG) – a supplement to *GI & Hepatology News* that addresses issues pertinent to trainees and early-career GIs – will switch to a primarily digital format. We are excited about this change and confident that it will allow for a more effective and widespread dissemination of content that is valuable to both AGA members and our readership more broadly.

In TNG's new format, current and future readers will receive each issue via a quarterly e-newsletter and all full articles will be available on the *GI & Hepatology News* website (http://www.mdedge.com/gihepnews). Moreover, we are excited to debut "In Focus: Brought to You by The New Gastroenterologist" in the February print issue of *GI & Hepatology News*. This section will feature expert-authored updates on pertinent topics in the field. The first of these will be a practical overview of the management of constipation by Nitin K. Ahuja, MD, MS, and James C. Reynolds, MD, AGAF (University of Pennsylvania). And be sure to watch out for subsequent In Focus features in the May, August, and November issues of *GI & Hepatology News*.

If you have any questions about these changes, or if there are any topics you'd be interested in writing or reading about in TNG, please contact Editor in Chief Bryson Katona, MD, PhD (bryson.katona@uphs.upenn.edu) or Managing Editor Ryan Farrell (rfarrell@gastro.org).

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Memorial and honorary gifts: a special tribute

Make a tribute gift to honor someone whose life has been touched by GI research or celebrate a special occasion such as a birthday while supporting the AGA Research Awards Program through the AGA Research Foundation. A tribute gift will make your loved one feel special because it honors their passion, and also provides us with needed support in furthering basic digestive disease research.

- Give a gift to the AGA Research Foundation in memory of a loved one. A memorial gift is a meaningful way to celebrate the legacy of a family member, friend, or colleague.
- Tell your friends and family members to donate to the AGA Research Foundation in YOUR honor.

To learn more, visit our website at www.gastro.org/contribute or contact Harmony Excellent at 301-272-1602 or hexcellent@gastro.org.

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4 Tips to help you talk to your patients about PPIs

Recent studies have linked the use of proton pump inhibitors (PPIs) to gastric cancer and chronic kidney disease. It is important that gastroenterologists understand these studies and address any patient concerns appropriately.

When discussing studies like these with your patients, try the following strategies to help alleviate their concerns.

1. Start simple. For mild reflux symptoms, patients can first try histamine H_2-receptor antagonists and antacids, especially in conjunction with lifestyle changes. AGA offers patient education materials on GERD, www.gastro.org/GERD, including lifestyle management, that you can share with your patients.

2. Be honest. Having open communication with your patients is important, so they can feel confident in informing you if symptoms are still happening, what side effects they are experiencing, or if they are thinking of stopping the medication. Help contextualize their concerns and provide your opinion. AGA offers talking points on several recent PPI studies, www.gastro.org/GERD.

3. Reassure patients that PPIs, like all drugs, have side effects. GIs should be cautious when prescribing long-term PPIs for acid reflux. Patients shouldn't stop medication without first talking with you about the risks and benefits. The benefits of using PPIs often outweigh the possible risks. In patients who remain on long-term PPIs, it is good practice to try to reduce the dose to maintain patients on the lowest dose possible to control their symptoms, since, in general, PPI side effects are related to the total dose.

4. Recommend and reassess. Patients should consider lifestyle modifications that may reduce or eliminate the need for PPIs for long-term use. AGA has recommendations from the Choosing Wisely campaign, GIs should sustain follow-up appointments with patients on PPIs to see if dosages should be lowered.

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Drug prices a focus of Senate examination of Azar

BY GREGORY TWACHTMAN
Frontline Medical News

WASHINGTON – Escalating drug prices topped the agenda as members of the Senate Health, Education, Labor & Pensions Committee interviewed Alex Azar regarding his nomination as secretary of the Department of Health & Human Services.

Mr. Azar, a former HHS deputy secretary and general counsel during the Bush Administration and a former president of Eli Lilly's U.S. operations, outlined his priorities to the Senate HELP committee during the Nov. 29 hearing.

"With a department the size of HHS, it is often difficult to prioritize. Nonetheless, should I be confirmed, I do envision focusing my personal efforts in four critical areas," including lowering drug prices, improving health care access and affordabilty, paying for outcomes, and tackling the opioid crisis.

Drug prices were the focus of many senators' questions, and while many contentious questions came from panel Democrats, Sen. Rand Paul (R-Ky.) signaled he was not yet on board with his approval for Mr. Azar's nomination.

"I think many [Americans] perceive [that drug companies use] their economic might to manipulate the system to maximize profits," Sen. Paul said.

"There are clearly abuses, Senator, in the system, and that is why one of the steps that I mentioned ... that I believe we have to go after, is the gaming of that," Mr. Azar responded. He suggested that although Hatch-Waxman rules give innovators a time frame to exclusively sell products "there should be a certain moment" when full generic competition should begin.

Sen. Paul also challenged Mr. Azar on the notion of drug importation.

There has not been a successful path to certify that drugs being imported are "safe and reliable," Mr. Azar noted.

Sen. Paul countered that "you would have to sit there and say that the European Union has unsafe drugs. ... It's just frankly not true."

Sen. Paul told Mr. Azar that if he cannot come up with a way to reimport drugs as a means of addressing the high cost of pharmaceuticals in the United States, "I can't support you."

Regarding his other priorities, Mr. Azar noted that, through his "experience helping to implement [Medicare] Part D and with my extensive knowledge of how insurance, manufacturers, pharmacy, and government programs work together, I believe I can bring the skills and experiences to the table that can help us address these issues, while still encouraging discovery so Americans have access to high-quality care."

He called for making health care "more affordable, more available, and more tailored to what individuals want and need. … Under the status quo, premiums have been skyrocketing year after year, and choices have been dwindling. We must address these challenges for those who have insurance coverage and for those who have been pushed out or left out of the insurance market by the Affordable Care Act."

Mr. Azar signaled that he will continue the push toward value-based


Mr. Alex Azar

care and will use the power of Medicare to lead the rest of the health care delivery system to follow suit.

"We can better channel the power of health information technology and leverage what is best in our programs and in the private competitive marketplace to ensure the individual patient is the center of decision making and his or her needs are being met with greater transparency and accountability."

Regarding the opioid crisis, Mr. Azar said that "we must heed President Trump's call to action and tackle the scourge of the opioid epidemic that is destroying so many individuals, families, and communities. We need aggressive prevention, education, regulatory, and enforcement efforts to stop overprescribing and overuse of these legal and illegal drugs. And we need compassionate treatment for those suffering from dependence and addiction."

Mr. Azar also was challenged on women's health issues, particularly the ability of employers to exclude health insurance coverage of contraception because of religious objections. He noted that there needs to be a balance between the medical needs of the patient and the rights of an organization to follow its conscience.

When queried about making contraception available over the counter, he noted that the regulations regarding OTC conversion are outdated, and he was encouraged that FDA Commissioner Scott Gottlieb, MD, is looking into that.

Mr. Azar also committed to working with improving interoperability of electronic health records as well as working with physicians to reduce the associated documentation burden.

He voiced his support of reforming the Affordable Care Act, adding that, "if it remains the law, my goal is to implement a way that leads to affordable insurance, leads to choice of insurance that leads to real access and not a meaningless insurance care, and insurance that has the benefits that people want, not what we say in D.C. for them."

He also expressed support for the use of block grants to help fund Medicaid.

Mr. Azar's appearance before the HELP committee was a courtesy as the Senate Finance Committee holds jurisdiction over his nomination. No confirmation hearing had been scheduled at press time.

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DDSEPeight
Digestive Diseases Self-Education Program

Quick quiz answers

Q1. Correct answer: A

Rationale
In patients with a good response to anti-reflux surgery who develop new dysphagia, an upper endoscopy is the test of choice. This will evaluate the structural integrity of the fundoplication, and evaluate for disruption and paraesophageal herniation. The esophagus can be inspected for esophagitis, and dilation of the fundoplication site can be performed. In the absence of heartburn or the original reflux symptoms, empiric acid suppression is not expected to improve the dysphagia. If the endoscopy is negative, esophageal manometry and barium swallow are the next studies of value. A pH study off PPI therapy is performed if recurrent reflux is suspected that does not respond to anti-reflux medications.

Reference
1. Johnson D.A., Younes Z., Hogan W.J. Endoscopic assessment of hiatal hernia repair. Gastrointest Endosc. 2000;52(5):650-9.

Q2. Correct answer: C

Rationale
In a population study of U.S. veterans infected with hepatitis C (n = 110,484), a Cox proportional hazards model was used to determine risk of developing cirrhosis and hepatocellular carcinoma for genotypes 1-4, after adjusting for age, period of service, race, sex, human immunodeficiency virus (HIV) infection, alcohol use, diabetes, body mass index, and antiviral treatment. Despite genotype 3 patients being younger, their risk of developing cirrhosis was highest with hazard ratio = 1.30 (1.22, 1.39), compared to genotype 1 (reference, HR 1.0), genotype 2 with HR = 0.68 (0.64, 0.73), and genotype 4 with HR = 0.94 (0.78, 1.14). Likewise, the risk of development of HCC was highest for genotype 3 HCV with HR = 1.80 (1.60, 2.03), compared to a genotype 2 (HR = 0.55; 0.47, 0.63), and genotype 4 (0.99; 0.68, 1.45).

It is speculated that the hepatic steatosis that is a direct result of genotype 3 HCV may contribute to the accelerated progression to cirrhosis and HCC, but this has not been proven and was not evaluated in this Veteran Affairs study.

Reference
1. Kanwal F., Kramer J.R., Ilyas J., et al. HCV genotype 3 is associated with an increased risk of cirrhosis and hepatocellular cancer in a national sample of U.S. Veterans with HCV. Hepatology. 2014;60(1):98-105.

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Small study supports safety of living liver donation

BY JIM KLING
Frontline Medical News

SCOTTSDALE, ARIZ. – A single-center analysis of complications following living liver donation found a low rate of severe complications and a high quality of life among donors. The results are similar to what has been seen in a previous multicenter study in the United States, and the authors hope that the results can help inform potential donors and their physicians.

There is a significant shortage of deceased liver donors, leading to the death of about 3,500 liver transplant hopefuls in 2016, compared with about 2,900 who received a transplant. Living donor transplant was developed and first attempted in 1996 as an attempt to counter this shortage, and for a brief period it was popular, peaking at 500 donor surgeries in 2001. But that year the death of a donor occurred in New York and received widespread publicity.

"That started a debate about the risks of doing liver donation, which resulted in a decrease in numbers, and at the moment we are doing about 250-350 living liver donations (per year) in the United States," Srinath Chinnakotla, MD, said during a presentation of the research at the annual meeting of the Western Surgical Association.

Overall, though, the study showed relatively few complications and that donors reported good quality of life. "There was a slight dip in health-related quality of life at 5 years and 10 years, but at all times the donors had significantly better quality of life compared to the standard population," said Dr. Chinnakotla, clinical director of pediatric transplantation at the University of Minnesota, Minneapolis.

The researchers examined long-term complications and quality of life among 176 liver donors who underwent surgery between 1997 and 2016 at the University of Minnesota. At total of 140 donors underwent a right-lobe hepatectomy without middle hepatic vein, 14 underwent right lobe with middle hepatic vein, 4 underwent left lobe, and 18 underwent left lateral segmentectomy.


Dr. Srinath Chinnakotla

The researchers then analyzed complications graded by the Clavien scale. They found that 59.1% of right-lobe donors experienced no complications at all; 5.8% had Clavien scale 1 complications, meaning something abnormal occurred but required no intervention; and 27.3% had a Clavien 2 complication, requiring pharmaceutical treatment, a blood transfusion, or parenteral nutrition. Clavien 3a complications, which required an intervention without general anesthesia, occurred in 1.9% of cases, and Clavien 3b complications, which required anesthesia, occurred in 5.8%.

A total of 81.8% of left-lobe donors experienced no complications, 4.5% had a Clavien 1 complication, and 13.6% a Clavien 2. There were no Clavien 3 or 4 complications in left-lobe donors.

Overall, the incidence of Clavien grade 3 or higher complications was 7%, there were no complications involving organ failure, and there were no deaths.

Quality of life, as measured by the 36-item Short Form Health Survey and an internally designed donor-specific survey, was higher among recipients than in the general population at all time points. The primary long-term complaints were incisional discomfort, which ranged from about 23% to 38% in frequency, and intolerance to fatty meals, which had a frequency of 20%-30%, and is likely attributable to accompanying cholecystectomy, according to Dr. Chinnakotla.

"The overall results appear to have been excellent," said William C. Chapman, MD, who was invited by the meeting organizers to review and comment on the study. Dr. Chapman is surgical director of transplant surgery at Washington University in St. Louis.

Dr. Chapman also noted that some studies in Asia have looked at reducing complications in donors, while avoiding a small-for-size graft, by using two left-lobe grafts from separate living donors (Liver Transpl 2015;21[11]1438-48). "We haven't been brave enough to do that in the United States, but I think that is a strategy we can look forward to in the future," said Dr. Chinnakotla.

No funding source was disclosed.

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The Liver Meeting 2017 NAFLD debrief – key abstracts

BY RICHARD MARK KIRKNER
Frontline Medical News

WASHINGTON – Nonalcoholic fatty liver disease (NAFLD) is a complex disease that involves multiple systems, and several standout abstracts at the annual meeting of the American Association for the Study of Liver Diseases emphasized the importance of multisystem management and the potential of combination therapies, Kymberly D. Watt, MD, said during the final debrief.

"The actual underlying mechanisms and the underlying processes that are going on are way more complicated than just inflammation and scarring," said Dr. Watt, associate professor of medicine and medical director of liver transplantation at the Mayo Clinic, Rochester, Minn. "We have numerous areas to target, including insulin resistance, lipid metabolism, oxidative stress, inflammation, immune modulation, cell death, etc."

She noted several studies that evaluated the prevalence of NAFLD, including a study that found that "about one-third of patients walking through the door of the clinic had nonalcoholic steatohepatitis [NASH]," suggesting physicians should consider screening at-risk patients (abstract 58). A Korean study found about 18% of asymptomatic lean individuals (body mass index less than 23 kg/m^2) had NAFLD and identified sarcopenia as a significant risk factor for NAFLD in these lean patients (abstract 59). "Sarcopenia is something that we really need to pay a lot more attention to," Dr. Watt said.

Other studies better outlined the increasing association between NAFLD and hepatocellular carcinoma, Dr. Watt noted (abstracts 2119 and 2102). Another study confirmed that men with NAFLD/NASH have almost twice the incidence of hepatocellular carcinoma (HCC) as women – 0.43%-0.5% vs. 0.22%-0.28%, with both groups significantly higher than the general population (abstract 2116). "And looking further, we can actually quote an HCC incidence in NASH of 0.009%," she added.

Again emphasizing the multisystem impact of NAFLD, Dr. Watt cited a study that calculated the cardiovascular risks incumbent with liver disease. Researchers reported that men and women at the time of NAFLD diagnosis had significantly higher rates of either angina/ischemic heart disease or heart failure (abstract 55). Women, specifically, had a higher risk for cardiovascular events earlier than men and overall are at equal risk to men, unlike in the general population where women are at lower risk. "We need to start looking at screening and prevention of other diseases in our patients with NASH," Dr. Watt said. "In addition, we need to be more aware of the elevated risk in these patients and not just approach them in the same way as the general population."

Physicians may be tempted to discontinue statin therapy in patients with chronic liver disease, but Dr. Watt cited a poster that showed that this results in worse outcomes (abstract 2106). The researchers found that continued statin use was associated with a lower risk of death with compensated and decompensated liver function. "These data help to educate certain patients of their risk of decompensation over time," Dr. Watt said.

An international study determined that the severity of advanced compensated liver disease is a key determinant in outcomes, finding that those with bridging fibrosis are at greater risk of vascular events, but

Continued on page 16

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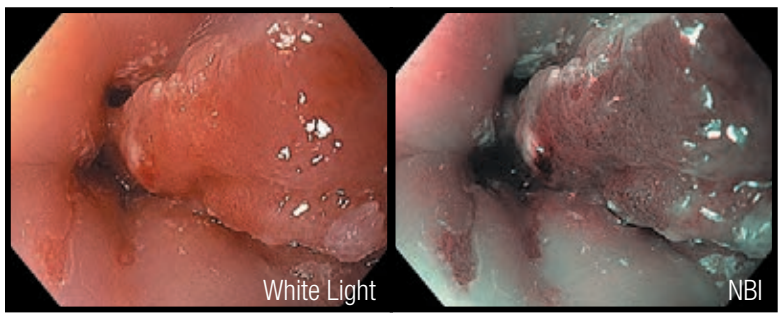

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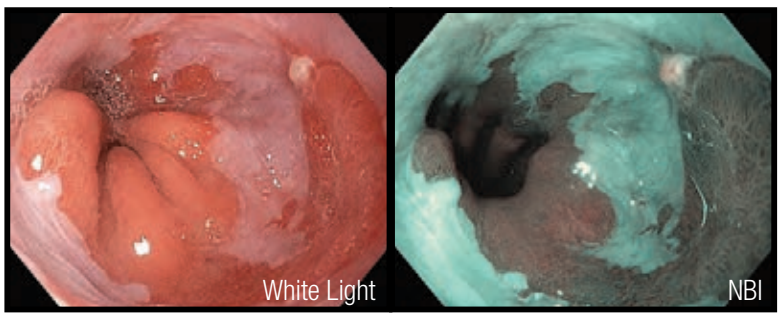

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Continued from page 14

those with cirrhosis and Child-Turcotte-Pugh A5 and A6 disease have much higher risks of hepatic decompensation and HCC out to 14 years (abstract 60). "The reason to look at these is to be able to tell your patients that they probably have a 30% increased risk of decompensation by 4 years," Dr. Watt said.

Dr. Watt pointed out three studies that shed more light on important biomarkers of NAFLD. One study reported that three biomarkers – alpha-2-macroglobulin, hyaluronic acid, and tissue inhibitor of metalloproteinase-1 – have a high sensitivity for differentiating low-stage and stage F3-F4 disease (abstract 95). Another study found that a measure using Pro-C3 and other clinical markers were predictive of F3 or F4 fibrosis in NAFLD (abstract 93). And other researchers found that a HepQuant-STAT measure of greater than 0.50 microM in patients who ingested deuterated cholic acid (d4-CA) solution may be a minimally invasive alternative to biopsy for diagnosing NASH (abstract 96).

Management studies focusing on varying targets were also presented. A trial of fibroblast growth factor–21 for treatment of NAFLD found that patients in the 10- and 20-mg dose arms showed improvement in MRI hepatic fat fraction, ALT, AST, and liver stiffness at 16 weeks vs. placebo. A few patients had some mild elevation to their liver enzymes on treatment (abstract 182). "So I think we need to remain cautious and watch these patients closely, but overall it seems to be reasonably safe data," she said. Another drug trial of the acetyl-CoA carboxylase inhibitor GS-0976 also showed promise for overall improvement in MRI steatosis measures (abstract LB-9).

Three preclinical studies of dual-agent therapies in animals have demonstrated improvement in inflammatory and fibrosis scores, Dr. Watt noted (abstracts 2000, 2002 and 2052). "There's no one drug that's going to be likely the magic cure," Dr. Watt said. "There will likely be a lot more focus and data coming out on dual-action agents." Another animal study addressed the burning question of whether decaffeinated coffee has the same protective effect against NASH as caffeinated coffee (abstract 2093). Said Dr. Watt: "If you are interested in the potential benefits of coffee but really can't handle the caffeine, this study suggests you may still be OK."

Finally, Dr. Watt noted an early study of three-dimensional printing has shown potential for replicating NASH tissue for bench studies (abstract 1963). "3-D printing is certainly a wave of the future," she said, pointing out that researchers have created a 3-D model that has some metabolic equivalency to NASH, with the inflammatory cytokine release, hepatic stellate cell activation, "and all of the features that we see in NASH. This may be of potential use down the road to avoid relying on animal models in preclinical studies."

The Liver Meeting next convenes Nov. 9-13, 2018, in San Francisco.

Dr. Watt disclosed ties to Bristol-Myers Squibb, Exelixis, and Seattle Genetics.

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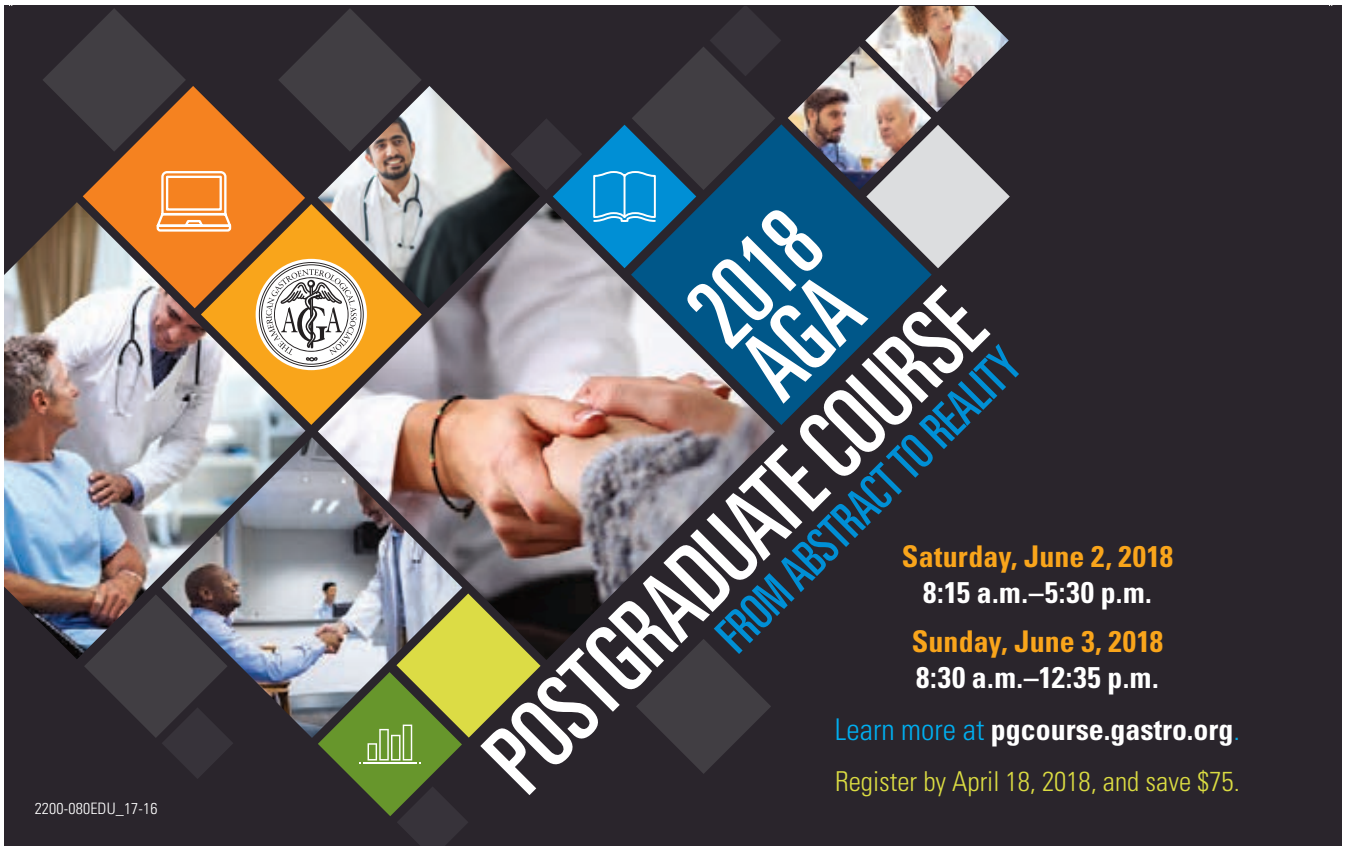

Insurance status plays a role

Testing *from page 1*

were included in the study, only 28% underwent MMR deficiency testing, and of 17,218 aged 30-49 years, only 43% were tested. The proportion of patients tested in both groups

'Although the proportions of patients tested increased during the study period, our results suggest that underutilization of MMR deficiency testing was significant and pervasive, even among young patients with CRC with a well-established risk of Lynch syndrome.'

increased between 2010 and 2012 (from about 22% to 33%, and from about 36% to 48%, respectively).

After the researchers controlled for all other covariates, factors significantly associated with being tested were higher educational level (odds ratio, 1.38), later diagnosis year (OR, 1.81), early-stage disease (OR, 1.24), and number of regional lymph nodes examined (OR, 1.44 for 12 or more lymph nodes). Factors associated with underuse of testing were older age (OR, 0.31), insurance status (Medicare, Medicaid, uninsured; ORs, 0.89, 0.83, and 0.78, respectively), research facility type (nonacademic vs. academic; OR, 0.44), rectosigmoid or rectal tumor location (OR, 0.76), unknown grade (OR, 0.61), and nonreceipt of definitive surgery (OR, 0.33).

MMR deficiency occurs in up to 15% of sporadic CRC and is a feature of Lynch syndrome, which occurs most often in patients under age 50 years. National guidelines have long recommended routine MMR deficiency testing for CRC patients in that age group, and universal testing has been recommended since 2014.

"Although the proportions of patients tested increased during the study period, our results suggest that underutilization of MMR deficiency testing was significant and pervasive, even among young patients with CRC with a well-established risk of Lynch syndrome. Our study ... identifies significant groups at risk for potential nonadherence to newly implemented universal testing guidelines moving forward," the investigators said, noting that the associations between type and utilization of patient testing and socioeconomic status, insurance status, and cancer program location are of particular concern.

Ongoing analyses to track progress toward "closing this important clinical service gap," will be needed, they concluded.

This study was funded by a grant from the National Institutes of Health, National Cancer Institute. The authors reported having no conflicts of interest.

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PERSPECTIVE

Study highlights 'sobering' lack of testing

The findings by Shaikh et al. are sobering, given the overwhelming published evidence regarding the importance of MMR deficiency testing, and they underscore a need to determine the causes of the low testing rates, according to Stanley R. Hamilton, MD, AGAF.

Importantly, they also highlight areas that are "potentially actionable." For example, the higher frequency of testing among those with higher educational levels, and underuse of testing in older patients and those from nonacademic facilities suggest that better education of physicians and patients about the value of testing could improve adherence to guidelines, Dr. Hamilton wrote in an editorial (JAMA Oncol. 2017 Nov 9. doi: 10.1001/jamaoncol.2017.3574).

Further, the lower frequency of testing among certain demographic groups suggests a need to address underserved and underresourced patient populations, he said, concluding that efforts must continue to meet the goal of universal testing and that those efforts must be accompanied by studies to evaluate the clinical utility of testing in reducing CRC mortality.

Dr. Hamilton is with the University of Texas MD Anderson Cancer Center, Houston. He is a member of the Fred Hutchinson Cancer Research Scientific Advisory Committee, a consultant for LOXO Oncology, and a member of the HalioDx Scientific Advisory Committee. He has a financial relationship with The Johns Hopkins University School of Medicine and with Merck.

Tc-325 effective for immediate GI tumor bleeding

BY MADHU RAJARAMAN
Frontline Medical News

The powder Tc-325 is effective for immediate hemostasis in patients with malignant gastrointestinal bleeding, according to results published in Gastrointestinal Endoscopy.

The compound achieved immediate hemostasis in 97.7% of patients with GI tumor bleeding, reported Alan Barkun, MD, AGAF, of the division of gastroenterology at McGill University Health Centre, Montreal, and his coauthors. Conventional endoscopic hemostatic methods, by contrast, have shown highly variable hemostasis rates in prior studies, ranging from 31% to 93%, the authors said.

"Tc-325 seems to be more predictably effective in providing initial hemostasis in upper GI tumor bleeding compared with conventional methods," they added.

The study included 88 eligible patients who initially presented with bleeding either as a result of a primary GI tumor, or metastases to the upper or lower GI tract. Almost 60% had an upper GI cancer site. Twenty-five patients died before the end of the 30-day observation period.

The recurrent bleeding rate at 72 hours was 15%. Bleeding rates at 7, 14, and 30 days' follow-up were 7%, 7.8%, and 1.9%, respectively.

Overall, 27.3% of patients experienced repeat bleeding within 30 days of Tc-325 treatment, all from upper GI sites. No recurrent bleeding occurred from lower GI lesions. Recurrent bleeding occurred in 38% patients who did not receive definite hemostasis within 30 days.

An international normalized ratio value greater than 1.3 was significantly associated with early recurrent bleeding in univariable analysis (P = .02; odds ratio, 5.08; 95% confidence interval, 1.33-19.33), as was an Eastern Cooperative Oncology Group (ECOG) score of at least 3 (P = .049; OR, 3.94; 95% CI, 1.01-15.38). Definite hemostatic treatment was associated with less recurrent bleeding (P = .009; OR, 0.15; 95% CI, 0.04-0.62).

'Tc-325 seems to be more predictably effective in providing initial hemostasis in upper GI tumor bleeding compared with conventional methods.'

Factors significantly associated with 6-month survival in multivariable analysis were an ECOG score of 0-2 (P = .001; hazard ratio, 0.14; 95% CI, 0.04-0.47); cancer stage 1-3 (P = .042; HR, 0.31; 95% CI, 0.10-0.96), and receiving definite hemostastic treatment (P = .002; HR, 0.24; 95% CI, 0.09-0.59), Dr. Barkun and his colleagues reported.

Although the results show promise for Tc-325 as an immediate treatment in the case of failed standard endoscopic hemostatic techniques or when definite hemostasis via radiation, surgery, and chemotherapy are unavailable, the long-term effects are comparable with conventional methods, at least in the upper GI tract, the authors said. Better results in the lower GI tract may be attributed to the presence of gastric juice in the upper GI tract, the investigators noted.

Limitations of the study include "its retrospective design with the possibility of missing information and selective data collection," as well as the possibility of decreased generalizability of results, Dr. Barkun and coauthors wrote. Nevertheless, its immediate effectiveness at achieving hemostasis and prevention of early bleeding indicate that the results may still be "used with confidence as guidance for any physician managing such patients," the authors said.

The investigators did not disclose any conflicts of interest. The study was funded by the Grant for International Research Integration: Chula Research Scholar, Ratchadaphiseksomphot Endowment Fund.

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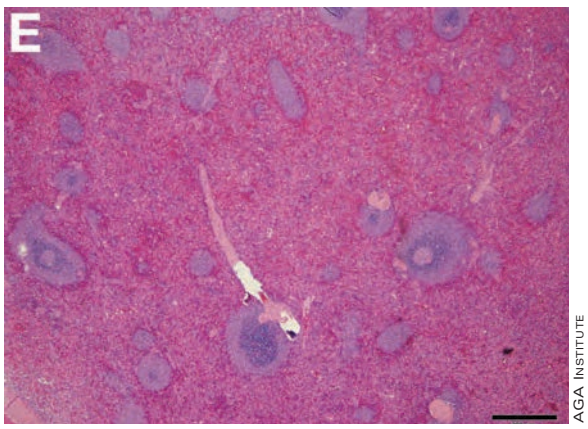
CLINICAL CHALLENGES AND IMAGES

The diagnosis

Answer to "What's your diagnosis?" on page 9: Posttraumatic splenosis

Pathologic examination of the specimen revealed a splenosis showing regular red and white pulp (Figure E). Splenosis is the heterotopic autotransplantation of splenic tissue within the abdominal or pelvic cavity and occurs in 16%–67% of patients with a history of splenic trauma or splenic surgery.[1] Nevertheless, hepatic splenosis is rare.[2] The literature documents only 16 case reports of hepatic splenosis, although the difficulty of diagnosis could have contributed to underreporting. Although usually harmless, splenosis is a rare cause of bowel obstruction or abdominal pain.[2] Moreover, splenic implants mimicking renal, intestinal, and hepatic masses have been described.[2] Usually, splenosis appears on CT as numerous round to oval structures with absent hilum, and with the same density as the spleen proper. Because CT's differentiation between tissues can be unreliable,[2] selective Tc-99m–labeled heat-denatured autologous red blood cell scintigraphy has been suggested.[2] However, the lack of data on the accuracy of Tc-99m-scintigraphy renders its diagnostic efficacy questionable. In our patient with hepatitis C, a diagnostic laparoscopy was indicated to diagnose the posttraumatic splenosis at the infundibulum of the gallbladder. In high-risk patients, detection of a new liver lesion with radiologically uncertain contrast behavior, diagnostic laparoscopy including histologic workup to exclude hepatocellular carcinoma is indicated. Hepatocellular carcinoma usually presents as solitary or multifocal nodules located within the liver parenchyma. Nevertheless, several cases of superficial hepatocellular carcinoma on the surface of the liver have been reported.[3] Splenosis may mimic abdominal neoplasia in patients with a history of severe splenic trauma or splenectomy and should be considered during oncologic workup.



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References

1. Fleming, C.R., Dickson, E.R., Harrison, E.G. Splenosis: autotransplantation of splenic tissue. Am J Med. 1976;61:414-9.
2. D'Angelica, M., Fong, Y., Blumgart, L.H. Isolated hepatic splenosis: first reported case. HPB Surg. 1998;11:39-42.
3. Ohmoto, K., Mimura, N., Iguchi, Y. et al. Percutaneous microwave coagulation therapy for superficial hepatocellular carcinoma on the surface of the liver. Hepatogastroenterology. 2003;50:1547-51.

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FDA approves first trastuzumab biosimilar

FDA NEWS

BY LAURA NIKOLAIDES
Frontline Medical News

The Food and Drug Administration has approved trastuzumab-dkst (Ogivri) as a biosimilar to trastuzumab (Herceptin) for the treatment of patients with metastatic gastric or gastroesophageal junction adenocarcinoma or HER2+ breast cancer.

This is the first biosimilar approved in the United States for the treatment of breast cancer or gastric cancer and the second biosimilar approved for the treatment of cancer, the FDA said in a statement.

The FDA approved a biosimilar to bevacizumab in September for the treatment of certain colorectal, lung, brain, kidney, and cervical cancers.

The approval of trastuzumab-dkst is based on structural and functional characterization, animal study data, human pharmacokinetic and pharmacodynamic data, clinical immunogenicity data, and other clinical safety and effectiveness data.

Common expected side effects of trastuzumab-dkst for the treatment of HER2+ breast cancer include headache, diarrhea, nausea, chills, fever, infection, congestive heart failure, insomnia, cough, and rash. Common expected side effects for the treatment of HER2+ metastatic gastric cancer include neutropenia, diarrhea, fatigue, anemia, stomatitis, weight loss, upper respiratory tract infections, fever, thrombocytopenia, mucosal inflammation, nasopharyngitis, and dysgeusia.

The biosimilar label contains a Boxed Warning – as trastuzumab does – about increased risks of cardiomyopathy, infusion reactions, pulmonary toxicity, and fetal toxicity.

The FDA's Oncologic Drugs Advisory Committee voted unanimously in July to recommend approval of the biosimilar, made by Mylan and Biocon.

AGA Resource

To prepare for the entry of biosimilars to the market, AGA is taking the lead in educating health care professionals and patients about biosimilars. Visit www.gastro.org/biosimilars to learn more.

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JAN. 12, 2018

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- AGA-Boston Scientific Technology and Innovation Pilot Award ($30,000)

Apply at www.gastro.org/research-funding.

AGA RESEARCH FOUNDATION

2750-050RSH_17-3

Dose-dependent response

Capsule *from page 1*

University of Alberta, Edmonton, and coauthors commented that the response rate with the capsules was higher than that seen in other studies of fecal microbiota capsules, which they suggested may partly be due to the larger amount of donor stool used in the study: 80-100 g, compared with 17 g and 25 g used in other studies.

"The higher efficacy observed in this study suggests a dose-dependent response to FMT, and a benefit of bowel lavage prior to FMT, because residual vancomycin was detected up to 8 days despite its discontinuation," they wrote.

Both treatment modalities achieved similar quality of life improvements. Both groups reported major improvements in domains including physical and emotional health, physical and social functioning, and general health, with no significant differences between the two arms of the study.

The cost per treatment in the colonoscopy group was $874 per patient, compared with $308 per patient in the capsule group.

"Although colonoscopy delivery is more invasive, resource intensive, costly, and inconvenient for patients, it has the advantage of identifying alternative diagnoses," the authors wrote. "Conversely, when FMT is given by oral capsules, it can be administered in an office setting, which could substantially reduce cost and wait time."

Both groups also showed significantly improved gut microbiota diversity, which approached that of the donor just 1 week after administration of the treatment.

While 30% of patients characterized FMTs as "unpleasant, gross, or disgusting," 79% of participants said the unpleasantness was the same or less than anticipated, and 97% said they would undergo the same treatment by the same delivery method again if needed.

However, significantly more patients in the capsule group described their experience as "not at all unpleasant," compared with the colonoscopy group (66% vs. 44%; 95% CI, 3%-40%; $P = .01$).

There were no colonic perforations seen in the colonoscopy group, and no infectious complications relating to the treatment in either group. One patient in each group died of underlying cardiopulmonary illness that was unrelated to the treatment, and the rate of minor adverse events was 5.4% in the capsule group and 12.5% in the colonoscopy group.

The authors acknowledged that the lack of a placebo group in the study meant they were not able to measure the size of the effect of fecal microbiota transplantation by either route. One earlier trial had also shown a placebo response rate of 45%.

The study was funded by Alberta Health Services and the University of Alberta Hospital Foundation. Four authors declared grants and other funding from the study funder and the pharmaceutical industry.

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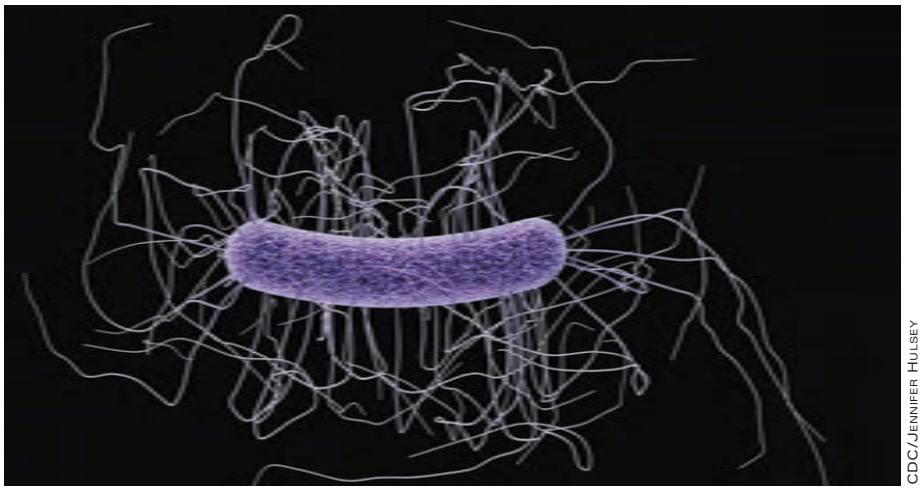
AGA Resource

The AGA Center for Gut Microbiome Research and Education serves as a virtual "home" for AGA activities related to the gut microbiome, including the AGA FMT National Registry, which will assess short- and long-term patient outcomes associated with FMT. Learn more at http://www.gastro.org/about/initiatives/aga-center-for-gut-microbiome-research-education.



CDC/Jennifer Hulsey

This illustration depicts the ultrastructural morphology exhibited by a single Gram-positive *Clostridium difficile* bacillus.

PERSPECTIVE

Uncertainties remain on fecal microbiota transplants

Clostridium difficile infection costs the U.S. health care system an estimated $1.5 billion each year, with 450,000 cases reported annually, 20% of which involve a recurrence of the infection. Fecal microbiota transplantation is increasingly being used as a treatment, but more widespread adoption is limited partly by the logistical difficulties of delivery.

This study offers encouraging data on delivery of fecal microbiota transplants via capsule, which may reduce barriers to adoption of this treatment; however, there are still some questions to be answered about the treatment's efficacy, such as the timing of delivery and the relative importance of stool components.

There are also other approaches that should be considered in future research on *C. difficile* infection, including the use of vancomycin tapers with and without "chasers" of fidaxomicin/rifaximin, the use of defined microbial communities, and the use of sterile, fecal-derived products, which may even supplant standard fecal microbial transplants in the future.

Krishna Rao, MD, Vincent B. Young, MD, PhD, and Preeti N. Malani, MD, are with the division of infectious diseases in the department of internal medicine at the University of Michigan, Ann Arbor. *These comments are taken from an accompanying editorial (JAMA. 2017 Nov 28;381:1979-80. doi: 10.1001/jama.2017.17969). Dr. Young reported consulting fees from Vedanta, Merck, and Finch Therapeutics and grants from MedImmune. No other disclosures were reported.*

Insurance status may be an issue

Bariatric *from page 1*

underwent 73,119 laparoscopic sleeve gastrectomy, laparoscopic Roux-en-Y gastric bypass, and laparoscopic adjustable gastric banding procedures. The patients were stratified by race and region.

DR. NGUYEN

Researchers found that bariatric procedures were performed at a much higher rate in the Northeast academic centers (2.21 per 1,000 obese persons), compared with the Midwest (0.73), South (0.50), and West (0.33).

In regard to race, the rates for blacks and whites were fairly similar in the Northeast (2.02 and 2.35 bariatric procedures per 1,000 obese persons, respectively), the South (0.59 and 0.63, respectively) and the West (0.45 and 0.43, respectively). There was a wider gap in the Midwest, with whites at 1.07 and blacks at 0.69.

Across the country, however, obese Hispanics were less likely than persons of the other two races to undergo weight-loss surgery. The gap was fairly small in the Northeast, where 1.74 per 1,000 obese Hispanics underwent weight-loss surgery, compared with rates of 2.02 and 2.35 among whites and blacks, respectively. But the disparity was much larger in the other parts of the country, with rates at 0.14 in the West, 0.11 in the South, and 0.33 in the Midwest, compared with rates from 0.43 to 1.07 among blacks and whites.

The reasons for the surgery gap are unknown. Dr. Nguyen pointed to several possible explanations: "lack of education of obesity as a disease by the primary care providers and the need for referral to a bariatric surgeon for patients with body mass index greater than 40 kg/m^2 or 35 kg/m^2 with obesity-related comorbidities; poor understanding of the benefits of bariatric surgery and its low risk; lack of understanding of the urgency for treatment by the patient and provider; and hurdles in obtaining coverage for the operation by insurers."

John Magaña Morton, MD, chief of bariatric and minimally invasive surgery at Stanford (Calif.) University School of Medicine and past president of the American Society for Metabolic and Bariatric Surgery, doesn't think discrimination is causing the disparity.

"It's probably a reflection of insurance status – Hispanics tend to be less insured than Caucasian or African American patients – as well as preference for patients to go to nonacademic centers," he said.

Indeed, a Kaiser Family Foundation analysis found that 21% of the 52 million Hispanics younger than 65 years in the United States were uninsured in 2015, compared with 9% of whites and 13% of blacks. Only Native Americans/Alaska Natives had an uninsured rate as high as Hispanics.

"In terms of need [for weight-loss features], it's certainly there for Hispanics," said Dr. Morton. "[Hispanic patients] have high rates of obesity and diabetes, both of which are helped by bariatric surgery."

He said about 40% of patients in his Palo Alto, Calif., practice are Hispanic, reflecting the high number in the local population.

It helps that Dr. Morton and several of his partners speak Spanish. "If you have a welcoming environment," he said, "that can make a difference."

The study authors and Dr. Morton report no relevant disclosures. No specific study funding is reported.

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AGA Resource

The AGA Obesity Practice Guide provides a comprehensive, multidisciplinary process to personalize innovative obesity care for safe and effective weight management, including the use of bariatric endoscopy and surgery. Learn more at www.gastro.org/obesity.

Database analysis suggests bariatric surgery safe for seniors

BY TED BOSWORTH
Frontline Medical News

NATIONAL HARBOR, MD. – Gastric bypass and sleeve gastrectomy procedures for weight loss should not be denied to patients older than 60 years, despite a slight increase in unadjusted mortality rates, according to an analysis of data from the Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program (MBSAQIP).

Based on data that was collected in 2015 and submitted to MBSAQIP, "bariatric surgery is safe in the elderly, even in those 70 years old and older," reported Tallal Zeni, MD, director of the Michigan Bariatric Institute in Livonia.

Although the analysis was drawn from one of the largest datasets to evaluate the safety of bariatric surgery in the elderly, it is not the first to conclude that morbidity and mortality rates are acceptably low, according to Dr. Zeni. This may explain why the proportion of bariatric procedures performed in patients 60 years of age or older has been increasing. In figures provided by Dr. Zeni, that proportion rose from 2.7% during 1999-2005 to 10.1% during 2009-2013.

There were 16,568 patients older than age 60 years entered into the MBSAQIP database in 2015. When those were compared with the 117,443 younger patients, the unadjusted rates of morbidity (6.5% vs. 6.0%) and mortality (0.3% vs. 0.1%) were higher for the older patients, but "they are close," according to Dr. Zeni. Both rates reached significance by the conventional definition ($P < .05$), but he suggested that they are lower in this study than those in prior studies of MBSAQIP datasets and that they are acceptable relative to the anticipated health benefits.

Above the age of 60 years, no correlation could be made between increasing age and increasing risk of morbidity, mortality, or rate of reoperations, according to Dr. Zeni.

Why should bariatric surgery be considered in older patients? He cited data from a study that showed the life expectancy in a 70-year-old without functional limitations is 13 years. As a result, he added, "it behooves us to provide them with the best quality of life we can."

Relative to prior MBSAQIP evaluations of bariatric surgery in the elderly, the proportion of patients undergoing sleeve gastrectomy relative to gastric bypass has been increasing, Dr. Zeni reported. In the analysis, approximately two-thirds of the bariatric procedures were performed with sleeve gastrectomy, which is higher relative to what previous MBSAQIP analyses have shown.

Based on rates of morbidity for those two surgical approaches in the analysis, that trend makes sense. While the higher 30-day mortality for gastric bypass, compared with sleeve gastrectomy, was not significant (0.38% vs. 0.26%; $P = .221$), all-cause morbidity was almost two times greater for those undergoing gastric bypass than it was for those undergoing sleeve gastrectomy (10.61% vs. 5.81%; $P < .001$), Dr. Zeni reported.

However, some of that difference may be explained by baseline disparities between the two groups. In the gastric bypass group, there were higher rates of preoperative diabetes (54% vs. 40%; $P < .001$), sleep apnea (57% vs. 50%; $P < .001$), and hyperlipidemia (59% vs. 54%; $P < .001$). Also, gastric bypass patients were more likely to have a history of a previous bariatric procedure (11% vs. 8.5%; $P < .001$) and to be in the American Society of Anesthesiologists Physical Status score of 3 (84% vs. 80%; $P < .001$), according to Dr. Zeni.

The specific complications more common in the gastric bypass group than the sleeve gastrectomy group included anastomotic leak (0.56% vs. 0.3%; $P = .017$), surgical site infection (1.74% vs. 0.61%; $P < .001$), pneumonia (0.87% vs. 0.32%; $P < .001$), and bleeding (1.14% vs. 0.5%; $P = .024$). Although the average operating time was 40 minutes longer in the bypass group, there were no significant differences in thromboembolic complications.

Overall, despite a modest increase in the risk of complications for bariatric surgery in elderly patients, that risk can be considered acceptable in relation to the potential health benefits, according to Dr. Zeni. He suggested that the data might encourage further growth in the rates of bariatric procedures among patients older than 60 years.

Dr. Zeni reports no relevant financial relationships.

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PRACTICE MANAGEMENT TOOLBOX: How to be an advocate for your profession and your practice

BY WALTER G. PARK, MD, MS

Our profession continues to be in the midst of significant transformation, which began with the passage of the Affordable Care Act (ACA) in 2010, and the Medicare Access and Children's Health Insurance Program Reauthorization Act (MACRA) in 2015, and continues with the current attempts to repeal and replace the ACA. Passed with strong bipartisan support, MACRA introduced a new system of rules and regulations for the Centers for Medicare & Medicaid Services (CMS) reimbursement, and with it an expanding lexicon of acronyms (i.e., MACRA, electronic health records [EHR], value-based modifier [VBP], meaningful use [MU], Quality Payment Program [QPP], Advancing Care Information [ACI], and certified EHR technology [CEHRT]).[1] One way to adapt (and evolve) is to become more informed of health policy and learn how to advocate on behalf of the profession. Although there are 15 physicians currently serving in Congress (including a gastroenterologist, Sen. Bill Cassidy, a Republican from Louisiana), seeking political office is not the only way to actively participate.[2] This article briefly summarizes some of the ongoing federal legislation and issues in the current session of Congress pertaining to gastroenterology, and how one can participate in advocating for these issues.


DR. PARK

Removing Barriers to Colorectal Cancer Screening Act of 2017

In the Affordable Care Act of 2010, Medicare beneficiaries were intended to have free access to any preventive health service designated Grade A by the U.S. Preventive Services Task Force, which includes colonoscopy for colon cancer screening. Because of an oversight in the legislation, when a polyp is found and removed, the procedure becomes a diagnostic colonoscopy and beneficiaries are liable for coinsurance, which can amount to $100-$300, disproportionately affecting lower-income beneficiaries because they often lack supplemental insurance coverage.[3] This legislation (H.R. 1017) will correct this mistake by waiving the coinsurance for Medicare beneficiaries who undergo a screening colonoscopy regardless of the outcome and hopefully will remove one barrier to getting patients screened for colon cancer.

Ambulatory Surgical Center Quality and Access Act of 2017

Many gastroenterologists perform endoscopy in ambulatory surgery centers (ASCs), which are safe, cost effective, and convenient sites for providing patient care. There has been a growing disparity in payment rates by CMS between ASCs and hospital outpatient departments: ASCs are reimbursed an average of 49% of the hospital outpatient department rate (compared with 86% in 2003).[4] This has occurred because ASC reimbursement updates are tied to the All Urban Consumer Price Index rather than the hospital market basket update. The All Urban Consumer Price Index measures inflation for goods and services that poorly correlate with typical ASC purchases. This piece of legislation (H.R. 1838, S. 1001) would change the ASC reimbursement update to the hospital market update, which would improve ASC payment predictability. In addition, it also would require publication of ASC quality data, improving transparency in delivered endoscopic quality of care.

Independent Payment Advisory Board

Under the Affordable Care Act, the Independent Payment Advisory Board (IPAB) was created to control excess Medicare spend-

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ing. This would occur when the CMS actuary finds that per-capita Medicare spending is projected to grow more quickly than the target growth rate; the IPAB then will be tasked with finding savings. The IPAB includes 15 members nominated by the president and confirmed by the Senate, of which fewer than half can be health care providers and none may be practicing medicine. Although the Board has not been formed, it is predicted that the IPAB will be triggered this year. Regardless of whether there is a board in place, the statute would require the secretary of Health and Human Services to implement cuts. Furthermore, most of the cuts would impact physicians disproportionately because hospitals are exempt from IPAB proposed cuts until 2020.[5] Legislation has been introduced and passed in the House (H.R. 849) and is now being considered in the Senate (S. 260, S. 251) to repeal the IPAB.

Medical research funding

Every year, Congress appropriates funds for the National Institutes of Health (NIH). In fiscal year (FY) 2016, NIH invested nearly $32.3 billion dollars annually in medical research. For FY 2017, NIH was allocated $33.1 billion, an increase of $825 million.[6] Despite this increase, NIH had previously lost 22% of its capacity to fund research because of previous budget cuts, sequestration, and inflationary losses from FY 2003 to FY 2015.[7] Most advocates of research argue for higher levels of funding to restore a path of sustained and predictable growth for U.S. biomedical research. The Trump administration recently released its budget request for FY 2018, calling for a decrease in NIH funding to $26.9 billion (22% cut).[8]

Another way to get more involved is to volunteer your time within the various GI societies on respective committees that focus on GI and health-related policies.

These selected brief summaries of federal legislation currently being considered show the reach, relevance, and potential impact of Congress on the daily practice of gastroenterology. In response, there are many opportunities to advocate for your practice and your patients. Perhaps the easiest way is to voice your concerns by emailing or calling your members (both House members and Senators) of Congress. Representatives in Congress routinely track and count these calls and emails to define their constituents' concerns. You can call the Capitol Switchboard at (202) 224-3121. Ask the operator to connect you with the senators and representative from your state. When you reach your congressperson's office, let them know the following:

- Your name and where you are calling from in the state.
- What you are opposing or supporting in pending legislation.

Many medical societies have available online tool kits on their webpage to easily identify a member's appropriate representatives in Congress and also provide prepopulated templated letters (that you also can personalize) to email. This takes approximately 5 minutes of your time and is effective. You can find these on the AGA's website (https://www.gastroadvocacy.org/actionalerts.aspx). Similar resources are available on the American Society for Gastrointestinal Endoscopy and American College of Gastroenterology websites.

For those who would like to do more, you can visit in person to advocate for your concerns. Members of Congress have offices both locally and in Washington, D.C. Members of Congress often have office hours while they are home in their districts and often do not have the distractions of votes or committee hearings so they are able to take more time to meet. When visiting, highlight your background and try to keep your concerns focused, sharing how a piece of legislation or regulation impacts you personally. Another great way to get to know your legislators – both representatives, senators, and local officials – is to invite them to visit your practice, your ASC, or your hospital. Members of Congress usually welcome such opportunities to learn more about health care delivery and see firsthand the complexities of our health system. Most importantly, this helps develop a relationship with the legislator and/or their staff. If you are interested in learning more about how to schedule such an appointment or need resources and tips for your visit, you can contact the AGA (advocacy@gastro.org) or one of the Gastrointestinal (GI) societies for assistance.

In addition, many medical societies and coalition groups sponsor advocacy events where you can travel to Washington, D.C., to meet with your representatives and their legislative staff. Another way to get more involved is to volunteer your time within the various GI societies on respective committees that focus on GI and health-related policies. Volunteering for one of these committees is an excellent way to quickly become informed and advocate for your profession. Finally, some medical organizations have their own political action committees. Learn more about AGA political action committees at http://www.gastro.org/agapac.

Recently, I received a note from my representative thanking me for visiting her office and for advocating for the "Removing Barriers to Colorectal Cancer Screening Act." Consequently, she decided to cosponsor the legislation. I am not sure how much of an impact I had and I can understand the skepticism about one's individual contribution to this process. In response, I submit that the act of participating in advocacy affirms a sense of agency – that there is always a choice and that voicing your endorsements and concerns is an extension of one's right to vote and responsibility as a citizen. If this appeal to ideals is not persuasive,

Continued on following page

Take-away points:

1. Health care reform is not going away – get informed and get active as there are many opportunities to advocate for the value of your practice and the care of your patients.
2. The AGA, ASGE, and ACG have wonderful resources on their websites to get educated and opportunities to get involved in advocacy.
3. Start by making a call to the office of your House member or senator, or visit their local office.

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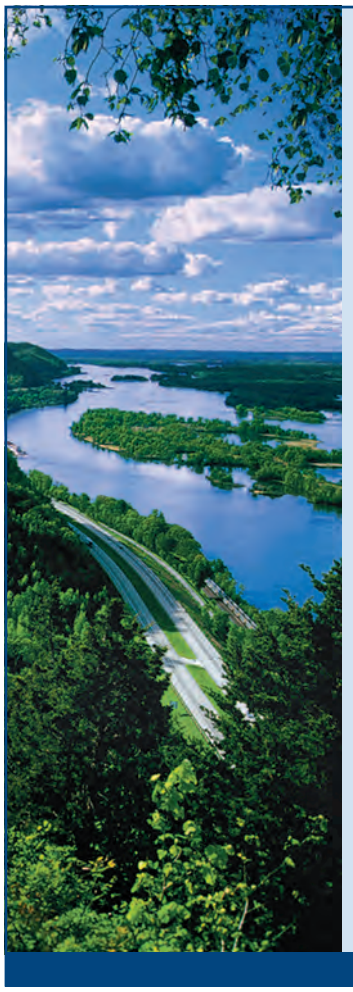

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then I would remind you of the well-known political adage, "If you are not at the table, you are on the menu." Not participating by putting one's head in the sand also has consequences. Although most members of Congress appreciate how important health care is for their constituents, legislation often advances slowly and requires persistent, iterative acts of advocacy. For example, in the previous session of Congress, 289 House members cosponsored the Removing Barriers to Colorectal Cancer Screening Act, yet it was not introduced for a vote. Driven by persistent excess costs that threaten the sustainability of Medicare and Medicaid, health care will remain a priority legislative topic for the next decade. To thrive, the GI community needs to provide leadership through education and engagement.

Content from this column was originally published in the "Practice Management: The Road Ahead" section of *Clinical Gastroenterology and Hepatology* (2017;15:1489-91).

References

1. Centers for Medicare & Medicaid Services. Quality Payment Program. Available from qpp.cms.gov. Accessed July 10, 2017.
2. Becker's Hospital Review. Meet the 15 physician members of the 115th US Congress. Available from http://www.beckershospitalreview.com/hospital-management-administration/meet-the-15-physician-members-of-the-115th-us-congress.html. Accessed July 10, 2017.
3. Fight Colorectal Cancer Coalition. Legislative goals. Available from https://fightcolorectalcancer.org/advocacy/hill/legislative-goals/. Accessed July 10, 2017.
4. Ambulatory Surgery Center Association. ASC Quality and Access Act of 2017. Available from http://www.ascassociation.org/govtadvocacy/legislativepriorities/asc-qaa-2017. Accessed July 10, 2017.
5. American Medical Association. Independent payment advisory board. Available from https://www.ama-assn.org/practice-management/independent-payment-advisory-board. Accessed July 10, 2017.
6. US Department of Health and Human Services. HHS FY 2017 budget in brief - NIH. Available from https://www.hhs.gov/about/budget/fy2017/budget-in-brief/nih/index.html. Accessed July 10, 2017.
7. Federation of American Societies for Experimental Biology. Research funding trends. Available from http://faseb.org/Science-Policy-and-Advocacy/Federal-Funding-Data/NIH-Research-Funding-Trends.aspx. Accessed July 10, 2017.
8. United States Government Publishing Office. Budget of the United States Government. Available from https://www.govinfo.gov/app/collection/budget/2018. Accessed July 10, 2017.

Dr. Park is in the department of medicine, division of gastroenterology and hepatology, Stanford University School of Medicine, Stanford, Calif. He discloses no conflicts of interest.

INDEX OF ADVERTISERS

IMPORTANT SAFETY INFORMATION

SUPREP® Bowel Prep Kit (sodium sulfate, potassium sulfate and magnesium sulfate) Oral Solution is an osmotic laxative indicated for cleansing of the colon as a preparation for colonoscopy in adults. Most common adverse reactions (>2%) are overall discomfort, abdominal distention, abdominal pain, nausea, vomiting and headache.

Use is contraindicated in the following conditions: gastrointestinal (GI) obstruction, bowel perforation, toxic colitis and toxic megacolon, gastric retention, ileus, known allergies to components of the kit. Use caution when prescribing for patients with a history of seizures, arrhythmias, impaired gag reflex, regurgitation or aspiration, severe active ulcerative colitis, impaired renal function or patients taking medications that may affect renal function or electrolytes. Use can cause temporary elevations in uric acid. Uric acid fluctuations in patients with gout may precipitate an acute flare. Administration of osmotic laxative products may produce mucosal aphthous ulcerations, and there have been reports of more serious cases of ischemic colitis requiring hospitalization. Patients with impaired water handling who experience severe vomiting should be closely monitored including measurement of electrolytes. Advise all patients to hydrate adequately before, during, and after use. Each bottle must be diluted with water to a final volume of 16 ounces and ingestion of additional water as recommended is important to patient tolerance.

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  - These cleansing results for the cecum included 91% of patients[2*†]

Aligned with Gastrointestinal Quality Improvement Consortium (GIQuIC) performance target of ≥85% quality cleansing for outpatient colonoscopies.[4]

SUPREP® BOWEL PREP KIT
(sodium sulfate, potassium sulfate and magnesium sulfate) Oral Solution
(17.5g/3.13g/1.6g) per 6 ounces

*This clinical trial was not included in the product labeling. †Based on investigator grading.

References: 1. IMS Health, NPA Weekly, May 2017. **2.** Rex DK, DiPalma JA, Rodriguez R, McGowan J, Cleveland M. A randomized clinical study comparing reduced-volume oral sulfate solution with standard 4-liter sulfate-free electrolyte lavage solution as preparation for colonoscopy. *Gastrointest Endosc.* 2010;72(2):328-336. **3.** SUPREP Bowel Prep Kit [package insert]. Braintree, MA: Braintree Laboratories, Inc; 2012. **4.** Rex DK, Schoenfeld PS, Cohen J, et al. Quality indicators for colonoscopy. *Gastrointest Endosc.* 2015;81(1):31-53.

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